REMARKS

Amendments to the Specification

Paragraph [0035] has been amended to correct a typographical error. On line 8, the

5 reference numeral for "host 612" has been amended to correctly read "host 602", as is

mentioned in said paragraph, line 3, and as is originally presented in Fig. 6. No new matter

has been introduced in the above-mentioned amendment.

10 ### Objections to the Specification

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference characters) not mentioned in the description: element 216 in Figure 2.

Applicant has amended paragraph [0006] of the specification as presented above to

15 include a reference to the port 216 of the IDE/SATA channel 206. The relation and role of

port 216 of the IDE/SATA channel 206 corresponds to those of the first and second ports 308

and 312 in the IDE/SATA channel 310. The latter ports are described in paragraph [0007],

lines 3-8, previously presented as "a first port 308 of an IDE channel 310" and "a second port

312 of the IDE channel 310". No new matter has been entered.

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Claim Rejection – 35 USC § 112

Claims 1, 11, 20, 30, & 39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter

25 **which applicant regards as the invention. The metes and bounds of "N devices" is not clearly defined within the specification (specification repeats the claim limitation "N devices").**

As pointed to by the Examiner, applicant has amended claims 1, 11, 20, 30, & 39 to further clarify the bounds of "N devices". Said claims have been modified to refer to the maximum number of peripheral devices to which the predetermined interconnection means was designed for providing the host access. Applicant refers to paragraph [0010], lines 17-25

5   as originally presented, where the IDE bus architecture "is designed to provide access to a maximum of only two peripheral devices" and further states in paragraph [0010], lines 32-34 that "the IDE channel was designed to provide access to only two peripheral devices". No new matter is added.

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Claim Rejections – 35 USC § 102

Claims 1-48 are rejected under 35 U.S.C. 102 as being anticipated by Jones et al. (US 2003/0084221 A1).

Claims 1, 11, 20, 30, & 39 have been amended as per Examiner's request to further

15   clarify the metes and bounds of "N devices", as described above.

Claims 1, 11, 20, 30, & 39 have been further amended to include clarification from

20   original claims 3, 13, 22, 32, & 41 that the host 602 modifies predetermined existing fields in packets or registers in an existing task file that are sent to the controller 612 through the single port 610 to specify a target peripheral device (one of 604-608, for example). No new matter has been added.

Regarding the patentability of the base claims with respect to existing fields and

25   registers, Jones paragraph [0101], lines 6-9 teaches "two new commands from the CPU are needed" (emphasis added), one of which is "a second command to identify the device".

The invention does not introduce new commands, but instead achieves accessing the plurality of peripheral devices by modifying predetermined portions of packets or task files.

Applicant points to paragraph [0028], lines 17-22, and paragraph [0031], lines 6-13, mentioning modifying the above to specify a target peripheral device. This is achieved by, for example, by utilizing existing unused bits in a typical ATAPI command packet to specify a target peripheral device, where the invention is "modifying control codes and/or reserved

5   vendor-specific bits in the ATAPI packet" (paragraph [0032], lines 2-6 and Figure 8). The balance of paragraph [0032] teaches a specific, non-limiting example of how modifying an Operation Code field within the ATAPI packet can target a read command to either a first or a second target device. Jones does not teach this claimed feature.

Accessing the plurality of peripheral devices is also achieved by utilizing a register in

10 an existing IDE task file to specify a target peripheral device; for example, utilizing "obsolete bits (obs)" in "the Device register in the IDE task file" (paragraph [0033], lines 1-5 and Figure 9). In addition, a combination of the two methods can also be implemented to achieve the same desired result (paragraph [0033], lines 8-11). As such, applicant asserts that introducing "special IDE commands" as taught by Jones (paragraph [0101], lines 2-5) is

15 distinct and different from modifying "predetermined fields in packets or registers in an IDE task file" "to specify a target peripheral device".

What's more, Jones neither teaches nor suggests a method whereby the host can recognize and distinguish between the plurality of peripheral devices coupled to the controller;

20 in fact, Jones only teaches recognizing a slave and master device on an IDE channel, which is already well known. Applicant points to paragraph [0105] of Jones, which reads "mm is 0XE0 if the device is connected as Master and 0xF0 [if] it is a Slave", and paragraph [0110], which states "mm is 0XE0 if the device is connected as Master slot and 0XF0 if the device is connected as a Slave slot". Specifically, Jones does not teach an implementation of the host

25 recognizing and distinguishing between each of the peripheral devices coupled to the IDE controller, recognizing a connected device only as either a Master or a Slave.

As presented in paragraph [0030], the invention "is not limited to the selection of master or slave but rather that host interface 700 is electrically connected to one port 610 of

the IDE channel 616 <u>as only master or as only slave</u>" (emphasis added), leaving "the other port … free for use by another peripheral device connected to the IDE channel 616." The invention discloses a system and method for a host to access more peripheral devices using a single port of the predetermined interconnection means than the maximum number of

5   peripheral devices that the predetermined interconnection means is designed for. That is, by modifying "predetermined existing fields in packets or registers in an existing IDE task file" to specify a target peripheral device (from claims 1, 11, 20, 30, & 39), the host recognizes and distinguishes between a plurality of IDE connected devices greater than the maximum of two for which an IDE channel is designed. This characteristic is also depicted in Figure 10 with

10   note to the default removable media drivers 810 and the plurality of virtual devices 812 within the operating system and vendor driver of the host. As such, applicant asserts that the teachings of Jones are distinct and different from the invention.

      Claims 9, 28, & 47 are dependent upon base claims 1, 20, & 39, respectively, and

15   therefore should be found patentable for at least the same reasons as their corresponding base claims (currently amended). Applicant respectfully requests consideration of claims 9, 28, & 47.

      For at least the reasons presented above, applicant asserts that claims 1, 9, 11, 20, 28,

20   30, 39, & 47 should be found patentable. Applicant respectfully requests consideration of these dependent claims in view of the currently amended base claims 1, 11, 20, 30, & 39.

      Claims 2, 12, 21, 31, & 40 being dependent upon currently amended claims 1, 11, 20, 30, & 39, respectively, and should be found patentable for at least the same reasons as those

25   presented for their respective base claims. Consideration of claims 2, 12, 21, 31, & 40 is politely requested.

      Claims 3, 13, 22, 32, & 41 are dependent upon amended base claims 1, 11, 20, 30, & 39, respectively, and make reference to the further limitation that the existing task file is

specifically an IDE task file. No new matter is entered, and consideration of claims 3, 13, 22, 32, & 41 is respectfully requested.

Claims 4, 14, 23, 33, & 42, being previously dependent upon claims 3, 13, 22, 32, & 41, respectively, have been subsequently amended to being dependent upon claims 1, 11, 20,

5 30, & 39, respectively. No new matter is entered in the mentioned amendment. Applicant asserts that claims 4, 14, 23, 33, & 42 should be found patentable for at least the same reasons as those presented for their corresponding base claims, and consideration of claims 4, 14, 23, 33, & 42 is respectfully requested.

Likewise, claims 5-8, 10, 15-19, 24-27, 29, 34-38, 43-46, & 48 are dependent upon

10 base claims 1, 11, 20, 30, & 39 and should be found patentable for at least the same reasons as those presented for their corresponding base claims. Applicant respectfully requests consideration of these dependent claims in view of the currently amended base claims 1, 11, 20, 30, & 39.
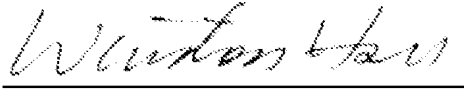
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<u>Conclusion:</u>

Thus, all pending claims are submitted to be in condition for allowance with respect to the cited art for at least the reasons presented above. The Examiner is encouraged to telephone the undersigned if there are informalities that can be resolved in a phone

20 conversation, or if the Examiner has any ideas or suggestions for further advancing the prosecution of this case.

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Sincerely yours,

Date: _____09.19.2007_____

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10   Note: Please leave a message in my voice mail if you need to talk to me. (The time in D.C. is 12 hours behind the Taiwan time, i.e. 9 AM in D.C. = 9 PM in Taiwan.)